ELSEVIER

Contents lists available at ScienceDirect

Journal of Forensic and Legal Medicine

journal homepage: www.elsevier.com/locate/jflm



Letter to the Editor

Patterned genital injury in cases of sexual assault



Dear Editor.

Astrup and colleagues should be commended for their project, as the question of patterned genital injury in cases of sexual assault is important and unsolved.¹ However, we wonder whether they gave themselves the means to answer this question.

The study design made it predictable that marked differences would be observed between cases and controls. Explicit inclusion criteria were lacking or unknown to the readers. Was the existence of previous consensual sexual intercourse a criterion for inclusion as a case? Did the authors set an upper time limit between the assault and medical examination? The authors seemingly did not address the issue of penetration of other body orifices than vagina in cases or controls. In another article on the same series of controls, the authors mentioned that ages of control subjects ranged from 18 to 40 years.² As expected in a student population, ages of control subjects were peaked around the median of 23. Indicating how many victims were under 18 or over 40 years of age would be of interest for the readers. Some features of the data collected were confusing. The question of the self-defined nature of the latest intercourse and the proposal made for sexual assault survivors to qualify a rape as a normal or soft intercourse were matters of concern to us. The fact that only 15% of assaulted women did not answer this question is puzzling. In addition, the authors mentioned that the different terms "soft", "normal", or "rough" proposed to participants remained undefined, which could hinder the use of the answers in the study.

As expected, results showed marked differences between cases and controls, which makes interpretation difficult. Cases were a small sample of 39 individuals, of which 5 (13%) were or may have been examined more than 48 h after the assault. The authors stated that they excluded controls who reported that their most recent intercourse was more than 48 h prior to examination. We wonder why the cases group was not limited to persons examined within 48 h after the assault, i.e. 34 individuals, and why authors did not decide to include patients over a longer period. Marked differences were observed in the reported alcohol intake before examination, as 61% of cases but – surprisingly – none of the controls reported alcohol intake in the 24 h preceding medical examination. Addictive behaviours at the time of sexual assaults and after the assaults are an important area of research but the authors did not mention whether the victims drank before or after the assault.^{3,4} Other differences that make interpretation of observed genital injuries difficult involved the proportions of so-called sexually active women in both groups (53% vs. 100%), histories of childbirth (28% vs. 11%), the use of a condom (0% vs. 12%), and ejaculation (28% vs. 63%).

Finally, a number of points raised in the discussion and in the conclusions are not supported by the data presented. The authors claimed that the frequency of haematomas was higher in cases than in controls, although the level of statistical significance was not obtained. No lesion, including abrasions, or association of lesions was found significantly more frequent in cases than controls using all three investigative methods. The authors' claim that they confirmed the differences in genital lesions proposed in earlier papers is puzzling, since the studies cited gave conflicting results and showed frequencies of injuries in assaulted patients higher than, equal to, or lower than controls.^{5–7} The authors made the hypothesis that larger genital lesions could occur in cases of sexual assault than in consensual intercourse. Since they took colposcopic photographs of lesions in cases and controls, as published in another journal, the measurement of the size of genital lesions in the present series could have easily validated or invalidated their hypothesis.⁸ We suggest that conclusions based on small series of common situations need to be taken cautiously.

Conflict of interest None.

References

- Astrup BS, Ravn P, Thomsen JL, Lauritsen J. Patterned genital injury in cases of rape – a case-control study. J Forensic Legal Med 2013;20:525–9.
- Astrup BS, Ravn P, Lauritsen J, Thomsen JL. Nature, frequency and duration of genital lesions after consensual intercourse – implications for legal proceedings. Forensic Sci Int 2012;219:50–6.
- Davis TM, Wood PS. Substance abuse and sexual trauma in a female veteran population. J Subst Abuse Treat 1999;16:123-7.
- Blume A, Standerwick K, Tucker L, Harris S, Sheron N. Sexual assault and coincident alcohol use in attendees at a genitourinary medicine clinic in the south of England. Int J STD AIDS 2012;23:115–9.
- Slaughter L, Brown CR, Crowley S, Peck R. Patters of genital injury in female sexual assault victims. Am J Obstet Gynecol 1997;176:609–16.
- Anderson S, McClain N, Riviello RJ. Genital findings of women after consensual and non-consensual intercourse. J Forensic Nurs 2006;2:59–65.
- McLean I, Roberts SA, White C, Paul S. Female genital injuries resulting from consensual and non-consensual vaginal intercourse. Forensic Sci Int 2011;204: 27–33.
- Astrup BS, Lauritsen J, Thomsen JL, Ravn P. Colposcopic photography of genital injury following sexual intercourse in adults. Forensic Sci Med Pathol 2013;9: 24–30.

Aurélie Beaufrère, MD, Renaud Vincent, MD Department of Forensic Medicine, Hôpital Jean-Verdier (AP-HP), Bondy F-93140, France Patrick Chariot, MD* Department of Forensic Medicine, Hôpital Jean-Verdier (AP-HP), Bondy F-93140, France

Institute for Interdisciplinary Research on Social Issues (IRIS), UMR 8156-997, UFR SMBH, Université Paris 13, Sorbonne Paris Cité, France * Corresponding author. Department of Forensic Medicine, Hôpital Jean-Verdier (AP-HP), Bondy 93140, France. Tel.: +33 148026325;

fax: +33 148026557.

E-mail address: patrick.chariot@jvr.aphp.fr (P. Chariot)

15 August 2013 Available online 29 August 2013